STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION



GOVERNOR

DAVID P. LITTELL COMMISSIONER

Oldcastle Lawn & Garden, Inc. d/b/a Jolly Gardener Products, Inc. **Androscoggin County** Poland Springs, Maine A-964-71-B-A (SM)

Departmental Findings of Fact and Order **Air Emission License** Amendment #1 After-the-Fact

After review of the air emissions license amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

- 1. Oldcastle Lawn & Garden, Inc. d/b/a Jolly Gardener Products, Inc. (Jolly Gardener) was issued Air Emission License A-964-71-A-N December 17, 2007 permitting the operation of emission sources associated with their mulch manufacturing facility.
- 2. The equipment addressed in this license is located at 481 Springwater Road in Poland Springs, Maine.
- 3. Jolly Gardener has requested an amendment to their license in order to replace the Retech Screen and CEC Screen engines. Both of these engines were destroyed in a fire and replaced with two new units, the Phoenix 3300 Screen and Warrior 1800 Screen. Also, Jolly Gardener has added a new piece of equipment, the CBI Pre-Screener.

B. Emission Equipment

The following new equipment is addressed in this air emission license:

Electrical Generation Equipment

Equipment	Maximum Capacity (MMBtu/hr)	Firing Rate (gal/hr)	Fuel Type, % sulfur
Phoenix 3300 Screen	1.0	7.5	ULS Diesel, 0.0015%
Warrior 1800 Screen	0.7	4.8	ULS Diesel, 0.0015%
CBI Pre-Screener	1.1	8.0	ULS Diesel, 0.0015%

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C. Application Classification

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Levels" as defined in the Department's regulations. The emission increases are determined by subtracting the current licensed emissions preceding the modification from the maximum future licensed allowed emissions, as follows:

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Pollutant	Current License (TPY)	Future License (TPY)	Net Change <u>(TPY)</u>	Sig. Level
PM	3.3	3.4	+0.1	100
PM ₁₀	3.3	3.4	+0.1	100
SO_2	0.2	0.2	-0-	100
NO _x	54.9	69.6	+14.7	100
CO	9.8	13.2	+3.4	100
VOC	3.6	4.9	+1.3	50

This modification is determined to be a minor modification and has been processed as such.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Phoenix 3300 Screen & Warrior 1800 Screen

For purposes of this license the engines associated with the Phoenix 3300 Screen, the Warrior 1800 Screen, and the CBI Pre-Screener are to be included with the

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CBI Grinder, Hogzilla Grinder, Barber Conveyor and Prentice Log Loader to be known collectively as "Jolly Gardener Engines."

Phoenix 3300 Screen and the Warrior 1800 Screen were both ordered after July 11, 2005 and manufactured after April 1, 2006. Therefore, the Phoenix 3300 Screen and the Warrior 1800 Screen are both subject to New Source Performance Standards 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

The CBI Pre-Screener engine was manufactured prior to April 1, 2006 and is therefore not subject to NSPS Subpart IIII.

A summary of the BACT analysis for the Jolly Gardener Engines is the following:

- 1. The Jolly Gardener Engines shall fire only ultra-low sulfur (ULS) diesel fuel with a maximum sulfur content not to exceed 0.0015% by weight.
- 2. The Jolly Gardener Engines shall each be limited to 3,200 hr/yr of operation based on a 12 month rolling total. Compliance shall be demonstrated by a written log of all engine operating hours.
- 3. Low Sulfur Fuel, 06-096 CMR 106 (last amended June 9, 1999) regulates fuel sulfur content, however in this case a BACT analysis for SO₂ determined a more stringent requirement of using ULS diesel was appropriate and shall be used.
- 4. Fuel Burning Equipment Particulate Emission Standard, 06-096 CMR 103 (last amended November 3, 1990) regulates PM emission limits for the CBI Grinder and the Hogzilla Grinder. The PM₁₀ limits for the grinders and the PM and PM₁₀ limits for the other engines are derived from 06-096 CMR 103.
- 5. NO_x and CO emission limits for the Barber Green Conveyor, Phoenix 3300 Screen, Warrior 1800 Screen, and the CBI Pre-Screener are based upon AP-42 data dated 10/96.
- 6. VOC emission limits for the Jolly Gardener Engines are based upon AP-42 data dated 10/96.
- 7. All other emission limits are based on vendor supplied data.
- 8. The Jolly Gardener Engines shall be operated and maintained in accordance with the manufacturer's written instructions. Jolly Gardener shall not change settings that are not approved in writing by the manufacturer.
- 9. Visible emissions from the Jolly Gardener Engines shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

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C. Annual Emissions

Jolly Gardener shall be restricted to the following annual emissions, based on a 12 month rolling total:

Total Licensed Annual Emission for the Facility (Tons/year)

(used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
CBI Grinder	1.3	1.3	0.1	20.8	3.5	1.0
CBI Pre-Screener	0.2	0.2	low land	7.8	1.7	0.6
Hogzilla Grinder	1.2	1.2	0.1	17.9	3.0	0.9
Barber Green	0.2	0.2	en 100	8.7	1.9	0.7
Conveyor						
Prentice Log Loader	0.2	0.2		2.4	0.5	0.7
Phoenix 3300 Screen	0.2	0.2		7.3	1.6	0.6
Warrior 1800 Screen	0.1	0.1	Seek and	4.7	1.0	0.4
Total TPY	3.4	3.4	0.2	69.6	13.2	4.9

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-964-71-B-A subject to the conditions found in Air Emission License A-964-71-A-N and in the following conditions.

<u>Severability</u>. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

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The following shall replace Condition (16) of Air Emission License A-964-71-A-N:

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(16) Engines

- A. Jolly Gardener shall limit the Jolly Gardener Engines to 3,200 hr/yr of operation (each) based on a 12 month rolling total. An hour meter shall be maintained and operated on each Jolly Gardener Engine. [06-096 CMR 115, BACT]
- B. The Jolly Gardener Engines shall only fire ULS diesel fuel (15 ppm). Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel delivered. Records of annual fuel use shall be kept on a 12-month rolling total basis. [06-096 CMR 115, BACT]
- C. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
CBI Grinder	PM	0.12	06-096 CMR 103,
			Section 2(B)(1)(a)
Hogzilla Grinder	PM	0.12	06-096 CMR 103,
			Section 2(B)(1)(a)

D. Emissions shall not exceed the following [06-096 CMR 115, BACT]]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
CBI Grinder	0.84	0.84	13.01	2.20	0.63
CBI Pre-Screener	0.13	0.13	4.85	1.05	0.39
Hogzilla Grinder	0.74	0.74	11.19	1.9	0.56
Barber Green	0.15	0.15	5.42	1.17	0.43
Conveyor					
Prentice Log Loader	0.15	0.15	1.53	0.28	0.43
Phoenix 3300	0.12	0.12	4.54	0.98	0.36
Screen					
Warrior 1800 Screen	0.08	0.08	2.91	0.63	0.23

E. Visible emissions from the Jolly Gardener Engines shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period [06-096 CMR 101]

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F. The Jolly Gardener Engines shall be operated and maintained in accordance with the manufacturer's written instructions. Jolly Gardener shall not change settings that are not approved in writing by the manufacturer. [40 CFR 60.4211(a)]

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G. The Phoenix 3300 Screen and the Warrior 1800 Screen are subject to PM, CO, and NO_x + VOC emission requirements set forth in 40 CFR 60, Subpart IIII. Compliance with these emission requirements shall be demonstrated by certification from the manufacturer that each engine class meets the appropriate Tier standards. [40 CFR 60, Subpart IIII]

The following shall replace Condition (20) of Air Emission License A-964-71-A-N:

(20) Annual Emission Statement

In accordance with *Emission Statements*, 06-096 CMR 137 (last amended November 8, 2008), the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

- 1) A computer program and accompanying instructions supplied by the Department; or
- 2) A written emission statement containing the information required in 06-096 CMR 137.

The emission statement must be submitted as specified by the date in 06-096 CMR 137.

DONE AND DATED IN AUGUSTA, MAINE THIS 30 th DAY OF March

, 2010.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: DAVID P. LITTELL, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-964-71-A-N.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 8/26/09
Date of application acceptance: 9/1/09

Date filed with the Board of Environmental Protection: This Order prepared by Lynn Ross, Bureau of Air Quality.

